

REMARKS

Claims 1-27 are rejected. Claims 28-30 are withdrawn from consideration. Claim 1 has been amended. Claims 1-30 are presently pending in the application. Favorable reconsideration of the application in view of the following remarks is respectfully requested.

Restriction under 35 USC § 121:

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-27, drawn to process, classified in class 427, subclass 162.
- II. Claims 28-30, drawn to product, classified in class 349, subclass 21.

During a telephone conversation with Ms. Blank a provisional election was made with traverse to prosecute the invention of group I, claims 1-27. Affirmation of this election without traverse is made by applicant in replying to this Office action. Claims 28-30 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Information Disclosure Statement:

The Examiner indicates that a two page cover sheet filed 7-14-03 did not include the within mentioned "enclosed PTO form 1449".

Attached is the missing form PTO-1449 which was attached to the information disclosure statement filed 7-14-03. The form PTO-1449 can be found in the Patent Application Information Retrieval (PAIR) system under 07-14-2003 "Oath or Declaration Filed" (contains 3 pages but 3rd page is PTO form 1449). Since the Foreign Patent Document is already in the PAIR system, an additional copy has not been provided.

Claims 1, 5, 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, there is mentioned "useful for displays" and "effective amount", both of which are vague and indefinite because they are relative concepts. Applicants have removed the terms "useful for displays" in claim 1. Applicants have removed the term "effective weight and have inserted the phrase "at least 0.1 weight percent based on the gelatin dry weight". Support for this amendment is found on page 6, second full paragraph of the specification as originally filed.

In claim 5, the recitation "and combinations thereof" is vague and indefinite. Applicants have amended claim 5 to recite Markush language. It is believed that this objection has been obviated.

In claim 25, the term ITO as an abbreviation is indefinite. Applicant traverses this rejection as ITO is the acronym, not an abbreviation for indium tin oxide and is used throughout the specification and Office Action.

Claims 1-2, 4, 16-17, 19-24, 26 rejected under 35 U.S.C. 103(a) as being unpatentable over Churchill ('060) in view of Churchill ('844). Applicants respectfully traverse this rejection.

Churchill ('060) is cited by the Examiner as disclosing a method of making a sheet comprising a polymer dispersed cholesteric liquid crystals including: providing an emulsion of cholesteric liquid-crystal dispersed in a solution comprising gelatin, coating the emulsion over a substrate, and drying the emulsion to form at least one electro-optical imaging layer comprising polymer-dispersed liquid crystal domains dispersed in a matrix comprising hardened gelatin (col 4, lines 33-70). The Examiner admits that Churchill ('060) does not disclose a hardening agent for the gelatin. As recited in claim 1 of the instant invention, the method of the present invention forms an imaging layer of polymer dispersed liquid crystals in a matrix of hardened gelatin. Churchill ('060) teaches a gelatin matrix which is not hardened and Churchill ('844) teaches a coating of capsules containing polymer dispersed liquid crystals. The Examiner then asserts that it would be obvious to combine Churchill ('060) with Churchill ('844), as both Churchill ('060) and Churchill ('844) teach hardening gelatin for an emulsion of cholesteric liquid-crystal. Applicants assert that the Examiner has mischaracterized Churchill ('844). Churchill ('844) teaches that one can form single, liquid wall capsules of gelatin and cholesteric material and then the capsule walls are hardened with glutaraldehyde. These capsules are then sieved

and coated on the substrate. Churchill ('060) never mentions hardening. Thus, the Examiner has conflated the two methods in Churchill ('060) and Churchill ('844) to reconstruct Applicants invention. As explained in the Background of the Invention section of Applicants application there were problems with method for coating polymer liquid crystals and this problem is a long standing one. It was not until Applicants invention that a solution was found. The patents of Churchill show that this problem has been around for over 30 years. Applicants have solved this problem and the Examiner, having read the present application appears to have recreated the solution to this problem through hindsight. This is impermissible and the rejection should be withdrawn.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Churchill ('060) in view of Churchill ('844) as applied to claims above, and further in view of Hodson. The Examiner admits that Churchill ('060) and Churchill ('844) do not disclose a substrate as polyester material. Hodson is cited as disclosing polyester material as a top layer (col 4, lines 17-33). The Examiner asserts it would have been obvious to one with ordinary skill in the art to include a substrate as polyester material because Hodson teaches suitability of such a material (col 4, lines 6-16). Applicants respectfully traverse this rejection. Although Hodson shows that a polyester material would be suitable as a substrate, it does not correct the deficiencies of the rejection of claims 1-2, 4, 16-17, 19-24, 26 under 35 U.S.C. 103(a) as being unpatentable over Churchill ('060) in view of Churchill ('844). Therefore Applicants assert that this rejection should be removed.

Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Churchill ('060) in view of Churchill ('844) as applied to claims above, and further in view of El-Hafidi et al. The examiner admits that Churchill ('060) and Churchill ('844) do not disclose a hardening agent as an active olefin. The Examiner cites El-Hafidi et al as disclosing a hardening agent as an active olefin (para 0113). The Examiner then states that it would have been obvious to one with ordinary skill in the art to include a hardening agent as an active olefin because El-Hafidi et al teaches hardening agents. Applicants respectfully traverse this rejection. El-Hafidi et al is concerned with a polypeptide material used as a recording medium. This material is not analogous to cholesteric liquid crystals as claimed in the present invention. There is no teaching in El Hafida that cholesteric liquid crystals can be used as the recording medium. Thus,

El-Hafidi is non-analogous art and not combinable with Churchill ('060) and Churchill ('844). Moreover, El-Hafidi does nothing to correct the deficiency of the rejection of claims 1-2, 4, 16-17, 19-24, 26 under 35 U.S.C. 103(a) as being unpatentable over Churchill ('060) in view of Churchill ('844). Therefore, this rejection should be withdrawn.

Claims 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Churchill ('060) in view of Churchill ('844) as applied to claims above, and further in view of Van den Zegel et al. The Examiner admits that Churchill ('060) and Churchill ('844) do not disclose a hardening agent as a vinyl sulfone compound as further recited by applicant in claims 8-11. The Examiner asserts that Van den Zegel et al discloses a hardening agent as vinyl sulfone compound further as recited by applicant in claims 8-11 (col 7, lines 5-23). The Examiner states it would have been obvious to one with ordinary skill in the art to include a hardening agent as a vinyl sulfone compound as further recited by applicant in claims 8-11 because Van den Zegel et al teaches gelatin hardening. Van den Zegel is concerned with photographic elements not cholesteric liquid crystals. Furthermore Van den Zegel does not correct the deficiencies of the rejection of claims 1-2, 4, 16-17, 19-24, 26 under 35 U.S.C. 103(a) as being unpatentable over Churchill ('060) in view of Churchill ('844). Therefore, this rejection should be withdrawn.

Claims 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Churchill ('060) in view of Churchill ('844) as applied to claims above, and further in view of Strathearn et al. The Examiner admits that Churchill ('060) and Churchill ('844) do not disclose stream mixing as claimed by applicant in claims 12-15. The Examiner asserts that Strathearn et al discloses stream mixing as claimed by applicant in claims 12-15 (col 1, lines 36-38) and that it would have been obvious to one with ordinary skill in the art to include disclose stream mixing as claimed by applicant in claims 12-15 because Strathearn et al teaches mixing problems (col 1, lines 10-35). Applicants respectfully traverse this rejection. Strathearn et al is concerned with resins, more specifically epoxy resins (col 1, lines 36-41), not gelatin. Gelatin and epoxy resins are not analogous compounds and therefore Strathearn is non-analogous art. Further, this does not correct the deficiencies of the rejection of claims 1-2, 4, 16-17, 19-24, 26 under

35 U.S.C. 103(a) as being unpatentable over Churchill ('060) in view of Churchill ('844). Therefore, this rejection should be withdrawn.

Claim 18 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Churchill ('060) in view of Churchill ('844) as applied to claims above, and further in view of Clikeman et al. The Examiner admits that Churchill ('060) and Churchill ('844) do not disclose a surfactant, biocide, and where the emulsion is coated over patterned ITO conductors in step b. Clikeman et al is cited as disclosing a surfactant, biocide, and where the emulsion is coated over patterned ITO conductors. The Examiner contends it would have been obvious to one with ordinary skill in the art to include a surfactant and biocide in the emulsion because Clikeman teaches each as may be added to an emulsion of the type used by the Churchill references, and specifically Clikeman et al teaches advantages for use of surfactants. Applicants respectfully traverse this rejection. Applicants contend that the Examiner is incorrect in the characterization of Clikeman. Clikeman does not teach an emulsion coated over an ITO conductor at col 20, lines 9-16, rather this passage discloses forming a powder and placing this powder on the ITO surfaces. A powder is not an emulsion. Thus, the Examiner has not provided a proper rejection. Furthermore, Clikeman does not correct the deficiencies of the rejection of claims 1-2, 4, 16-17, 19-24, 26 under 35 U.S.C. 103(a) as being unpatentable over Churchill ('060) in view of Churchill ('844). Therefore, this rejection should be withdrawn.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Churchill ('060) in view of Churchill ('844) as applied to claims above, and further in view of Ferguson ('423). The Examiner admits that Churchill ('060) and Churchill ('844) do not disclose second conductors formed, using printed inks, over the dried coating. The Examiner cites Ferguson ('423) as disclosing conductors formed using printed inks and asserts it would have been obvious to one with ordinary skill in the art to include after step (c) second conductors formed, using printed inks, over the dried coating because Ferguson ('423) teaches devices useable for an electrode using the invention. Applicants respectfully traverse this rejection. Ferguson is concerned with encapsulated liquid crystals (Abstract) not a matrix of gelatin and liquid crystals as claimed in the present invention. Furthermore, Ferguson does not correct the deficiencies of the rejection of claims 1-2, 4, 16-17, 19-24, 26 under 35 U.S.C. 103(a) as being

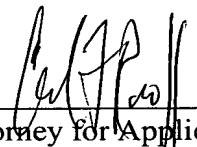
unpatentable over Churchill ('060) in view of Churchill ('844). Therefore, this rejection should be withdrawn.

Double Patenting:

Claim 1 and 22 are rejected on the ground of nonstatutory obviousnesstype double patenting as being unpatentable over claims 1-5 of U.S. Patent No. 6,423,368. Although the conflicting claims are not identical, they are not patentably distinct from each other because recitations such as "uniformity" is well know in the art. Applicants have provided a terminal disclaimer to obviate this rejection.

It is believed that the foregoing is a complete response to the Office Action and that the claims are in condition for allowance. Favorable reconsideration and early passage to issue is therefore earnestly solicited.

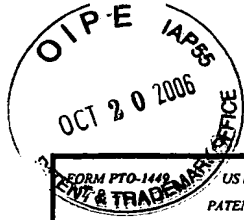
Respectfully submitted,



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If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.



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| FORM PTO-1449 PATENT AND TRADEMARK OFFICE | | U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | | Atty. Docket No. 85854CPK Customer No. 01333 | | Serial No. | |
| If AFTER the later date of the first Office Action or 3 months from filing, use only with Rule 97(E) Certificate or Fee | | | | Applicant: Stanley W. Stephenson, et al | | | |
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| LIST OF ART CITED BY APPLICANT <i>(Use several sheets if necessary)</i> | | | | | | | |
| U.S. PATENT DOCUMENTS | | | | | | | |
| Examiner Initial* | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE | |
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| | 6,061,107 | 5/9/00 | Yang et al. | | | | |
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| | 1 116771 A2 | 7/18/01 | EP | | | | X |
| OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.) | | | | | | | |
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